

**REMARKS:**

This paper is filed in response to the final Office Action dated September 30, 2008 for the above-captioned U.S. Patent Application. That office action is a rejection of claims 1-6, 8-16, 18-20, and 22-30.

More specifically the Examiner rejects claims 1-3, 5-6, 8, 16, 18-20, 23-26, and 30 under 35 USC 103(a) as being unpatentable over Barrus (US5410305); rejects claims 4, 9-10, and 27 under 35 USC 103(a) as being unpatentable over Barrus in view of Wright (US6912605); and rejects claims 11-15 and 28-29 under 35 USC 103(a) as being unpatentable over Barrus in view of Kammer (US6950645). The Applicant traverses the rejections.

Claims 1-2, 6, 18, 20, 22, 25, and 30 have been amended. Claims 31-33 have been added. Support for the amendments can at least be found on page 3 line 25 to page 4 line 26. No new matter is added.

The Applicant notes that Barrus discloses a keyboard which has a sleep mode for conserving power. The keyboard will enter the sleep mode whenever there are no input commands waiting to be processed. The keyboard will remain in the low power mode until it is interrupted by a closed switch or connection of the keyboard to a computer. Barrus discloses that the microcontroller of the keyboard wakes up in response to a keystroke signal and scans the keyboard to determine which key has been pressed (column 10 lines 39 to 41).

An exemplary embodiment of the invention as disclosed in independent claim 1 relates to a device. The device comprises a touch-entry user input device which is configured to enable user input. The device has a first mode in which the device does not perform a first function and a second mode in which the device does perform the first function. The device is configured when it is in the first mode, to initiate exit from the first mode and entry into the second mode at the initiation of a user input and performs the first function at the completion of the user input. The exit from the first mode occurs before the discrimination of the user input.

The Applicant maintains that in Barrus, no distinction is made between the initiation of an input and the completion of an input. Therefore, although the Applicant does not agree that a modification is proper, the Applicant submits that a person skilled in the art would not be motivated to consider modifying Barrus in order to disclose or suggest the claimed invention. The Examiner gives several examples of what he believes could be considered to be the initiation and completion of inputs, however, the Applicant submits that it is only with the benefit of hindsight knowledge of the invention that these analogies can be made. The Applicant submits that there is no hint or suggestion in Barrus itself that any significance should be attached to any particular initiation or completion of inputs based on, for example, a point of building up enough voltage to induce a key press detection or a completion of a keystroke. The Applicant argues that, in the rejections, the Examiner appears to improperly disregard these inventive elements of the claims. The Applicant contends that, for at least these reasons, the claims of the pending application are novel and non-obvious with respect to Barrus.

Exemplary embodiments of the invention as defined by independent claim 18 relate to a corresponding method. Independent claim 18 also includes the feature that there is an inherent delay in transferring the device from the first mode to the second mode.

The Applicant submits that there can be found no disclosure or suggestion of such a delay in all of Barrus. There would be no reason why a person skilled in the art would be motivated to introduce such a feature into Barrus because this would appear to make the keyboard perform slower which would be clearly be considered disadvantageous to Barrus. Therefore the Applicant maintains that this feature is also novel and non-obvious with respect to Barrus.

Embodiments of the invention as defined by independent claim 22 include at least all of the new and non-obvious features of independent claim 1 and are therefore new and non-obvious for at least the above mentioned reasons.

Exemplary embodiments of the invention as defined by independent claim 25 include at least all

of the novel and non-obvious features of independent claim 1 and are therefore novel and non-obvious for at least the above mentioned reasons. Exemplary embodiments of the invention as defined by independent claim 25 also include the feature that the first function is a communications function with another device.

The Applicant notes that the Examiner appears to be of the opinion that the functions of Barrus that are performed in response to the completion of the user input may either be the scanning of the key matrix or reading a key stroke from a queue. The Applicant submits that neither of these are communications functions can be seen to be with another device for at least the reason that these functions are performed by the microprocessor of the keyboard in Barrus. It can be clearly seen from Fig. 3 of Barrus that the microprocessor is part of the keyboard 10 and not another device. Furthermore, when performing the above mentioned functions the microprocessor, in Barrus, only uses other components of the keyboard 10 and thus does not need to communicate with any other device. Further, it is noted that the keyboard in Barrus may be configured to communicate with a computer, however this communication can not be seen to take place at the completion of a user input which also causes the keyboard to exit a low power mode. The Applicant submits that for at least these reasons, the rejections of the pending claims are seen to be improper and the rejections should be removed.

Further, the Applicant submits that there appears to be no reason why a person skilled in the art would be motivated to introduce an additional communications function into the disclosure of Barrus because this would appear to increase power consumption which would contradict the motivation for Barrus.

If the Examiner insists that the microprocessor is a separate device from the other components of the keyboard then, the Applicant submits, this is seen to be inconsistent with the analysis of the other claims in which it has been stated that the "device" is the keyboard. Also the microprocessor does not comprise a touch entry user input device configured to enable user input as is disclosed by the claims and therefore does not disclose or suggest all of the features of the claims.

Furthermore, the Applicant contends that can not be seen a reason why a person skilled in the art, based on the disclosure of Barrus, would be motivated to separate the keyboard into individual components. The Applicant submits that it appears to be only with hindsight knowledge of the invention that the components of the keyboard 10 can be selected so as to arrive at something approaching the claimed invention.

Embodiments of the invention as defined by independent claim 30 relate to a method comprising detecting an initiation of a user input and in response to the detection of the initiation of the user input initiating a transfer from a first mode in which a device is not capable of performing a first function to a second mode in which the device is capable of performing the first function. The initiating the transfer includes sending a message to another device and receiving a message from the another device. The method, according to an exemplary embodiment of the invention, also relates to discriminating the user input after the transfer from the first mode to the second mode has been initiated and detecting a completion of the user input and performing the first function in response to the detection of the completion of the user input.

The Applicant submits that Barrus only discloses that the microcontroller of the keyboard wakes up in response to a keystroke signal. There can be found no disclosure or suggestion that this "waking up" of the microcontroller involves any communications function. There appears most certainly no disclosure, in Barrus, of sending a message or receiving a message or even another device from which the messages may be sent or received in order to initiate exit from a first mode. Therefore this feature of the pending claims is clearly novel and non-obvious with respect to Barrus.

The Applicant maintains that this feature is also novel and non-obvious with respect to Barrus because there would be no reason why a person skilled in the art would be motivated to introduce such a feature into Barrus. Introducing the feature of the transmission of messages to another device before the microcontroller can "wake up" would make the keyboard of the prior art significantly more complicated. This would contradict the motivation of Barrus, that it is

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advantageous to produce simple data entry devices. Also such a modification would increase the amount of communication needed between separate devices which is also something which is considered to be disadvantageous in Barrus. Barrus discloses that the communication between a keyboard and a computer may be reduced by only dumping information from the keyboard to a host computer when the keyboard is connected to the host computer.

Therefore the Applicant maintains that the embodiments of the invention, as at least defined by independent claim 30, are novel and non-obvious.

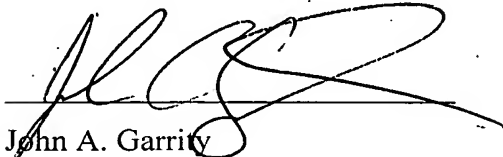
The Applicant also maintains that the features of the dependent claims are allowable at least for the reason of their dependency from an allowable independent claim.

For at least the reasons stated the Applicant respectfully requests that the Examiner remove the rejections and allow the claims.

Further, the Applicant submits that although not all the rejections are addressed in the Response the Applicant does not acquiesce to these rejections.

In view of the arguments presented the Examiner is respectfully requested to reconsider and withdraw the rejections of claims 1-6, 8-16, 18-20, and 22-30 and to allow each of the pending claims 1-6, 8-16, 18-20, and 22-33. Should any unresolved issue remain, the undersigned representative welcomes the opportunity to resolve them via teleconference as the Examiner may deem it appropriate to do so.

Respectfully submitted:



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### **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450.

12.22.2008

Date

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Name of Person Making Deposit